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Notice of Allowability	Application No.	Applicant(s)	
	10/645,478	KOIKE ET AL.	
	Examiner	Art Unit	
	Beth E. Owens	2824	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the restriction election filed 29 October 2004.
2. ☒ The allowed claim(s) is/are 1 and 5-8.
3. ☒ The drawings filed on 22 August 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>08222003</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


 MICHAEL S. LEBENTRITT
 PRIMARY EXAMINER

Election/Restrictions

1. Applicant's election without traverse of Species 1 and cancellation of claims 2-4 and 9-17 in the reply filed on 29 October 2004 is acknowledged.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

In the Title:

Replace the title with the following: "Method of Formation of a Capacitor with a Solid Electrolyte Layer Comprising an Organic Semiconductor, and Method of Production of Circuit Board".

In the Claims:

Claim 1, line 10: insert --foil-- after "metal".

Claim 1, line 16: replace "thermo compression" with --thermo-compression--.

Allowance

3. Claims 1 and 5-8 are allowed.
4. The following is an examiner's statement of reasons for allowance:

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There is no prior art available nor obvious motivation to combine elements of prior art which teach a method of formation of a capacitor forming part of an electric circuit when producing a circuit board with that electric circuit built in, including the steps of: forming at a scheduled position for formation of the capacitor of the circuit board in the process of production a bottom electrode layer comprised of at least one type of valve metal selected from the group comprised of aluminum, tantalum, niobium, tungsten, vanadium, bismuth, titanium, zirconium, and hafnium; forming on said bottom electrode layer a dielectric layer comprised of an oxide of at least one type of valve metal selected from said group; and integrally forming on said dielectric layer a solid electrolyte layer comprised of an organic semiconductor and a top electrode layer comprised of metal foil on top; said step of integrally forming on said dielectric layer said solid electrolyte layer and top electrode layer including the steps of: making one surface of the top electrode metal foil carry powder of said organic semiconductor by compression bonding and forming a solid electrolyte layer comprised of said organic semiconductor sandwiched between said metal foil and said dielectric layer and closely bonded to the two by thermocompression bonding of organic semiconductor powder carried by compression bonding on said dielectric layer through said metal foil.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

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preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. The following prior art, which is considered pertinent to applicant's disclosure although not relied upon, includes "Electrolytic Capacitor with Polymer Conductor" by Shaffer; "Solid Electrolytic Capacitor" by Tsuchiya et al.; "Charge Transfer Complex and Solid Electrolytic Capacitor Employing the Same" by Shindo et al.; "Fabrication Method of Solid Electrolytic Capacitor" by Kobayashi et al.; and "Method for Manufacturing Solid Electrolytic Capacitor Using Functional Polymer Electrolytic Composition" by Shin et al.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth E. Owens, Ph.D. whose telephone number is 571.272.1882 and fax number for unofficial communications is 571.273.1882.

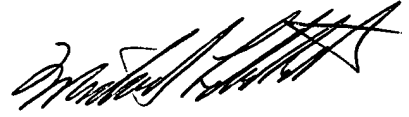
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms, can be reached on 571.272.1869. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306 for official communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571.272.2800.

BEO

BEO 11.28.04



MICHAEL S. LEBENTRITT
PRIMARY EXAMINER